**Amendments to the Claims**

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (currently amended) Method of selecting at least one transmission channel from a plurality of transmission channels, in a time division multiple access protocol, comprising the steps of:

receiving for each channel a periodic indication of the transmission quality of that channel;

storing ~~these~~ each of the periodic indications received for each channel during a time window;

determining, for each channel, the number of stored periodic indications during the time window for a respective channel that are better than a current transmission quality indication for the respective channel, to provide a rank of the respective channel based on the number of stored periodic indications; and

selecting at least one channel from among the plurality of transmission channels that has a best rank~~, the rank being a number of stored indications for the respective channel during the time window that are better than a current transmission quality indication~~.

2. (canceled)

3. (currently amended) Method according to Claim 1, ~~characterized in that it consists, during~~ further comprising a step (S0) that comprises[[, in]] determining the number of channels N, the size of the time window T and the initial values of the transmission qualities of each channel during the time window, and updating ~~in that~~ these parameters ~~may be updated~~ by interrupting the method at moments chosen by a re-initialization ~~reinitialization~~ finite state machine~~, particularly when the number of channels N changes due to the activity of the users~~.

4. (currently amended) Method of selecting at least one transmission channel from a plurality of transmission channels, in a time division multiple access protocol, comprising the steps of:

receiving for each channel a periodic indication of the transmission quality of that channel;

storing these indications for each channel during a time window;

selecting at least one channel from among the plurality of transmission channels that has a best rank, the rank being a number of stored indications for the respective channel during the time window that are better than a current transmission quality indication,

~~Method according to Claim 3, characterized in that it consists in~~ wherein the method includes executing, during each unit of time, the [[said]] series of instructions comprising ~~consisting in~~:

executing a loop (B1) to determine for each channel (2_i) the rank (Pi);

selecting, during a step (S5), from the channels for which data are to be transmitted at least one channel (2_j) that has the best rank (Pj); and

during a step (S6), giving transmission authorization at least to the channel (2_j).

5. (currently amended) Method according to Claim 4, ~~characterized in that~~ wherein the loop (B1) comprises ~~consists~~, for each channel (2_i, where i is from 1 to N)[[, in]]:

acquiring, during a step (S1), a transmission quality indication of the channel (2_i), that is Ci(t);

initializing, during a step (S2), the rank Pi at 1;

executing a second loop (B2) in order to determine the rank (Pi); and

executing a third loop (B3) in order to update the transmission quality indications of the channel (2_i) during the time window.

6. (currently amended) Method according to Claim 5, ~~characterized in that~~ wherein the loop (B2) comprises

~~consists~~, for each loop index (k, where k is from 1 to T)[[, in]]:

evaluating the result of a test (T1) defined by the relation: Ci(t-k) > Ci(t);

incrementing the rank (Pi) by one unit during a step (S3) if the result of the test (T1) is positive;

otherwise, evaluating the result of a test (T2) defined by the relation (Ci(t-k) == Ci(t)) AND (RAND < 1) where RAND is a function returning a random variable, in particular uniformly distributed over the interval [0,2]; and

executing the step (S3) of incrementing the rank (Pi) if the result of the test (T2) is positive.

7. (currently amended) Method according to Claim 5, ~~characterized in that~~ wherein the loop (B3) comprises ~~consists~~, for each loop index (k, where k is from T to 1)[[, in]]:

assigning the previously stored value Ci(t-k+1) to the variable Ci(t-k) during a step (S4).

8. (currently amended) Method according to Claim 7, ~~characterized in that~~ wherein a random choice is applied to the step (S4) when several active channels have the same best rank (Pi).

9. (currently amended) Method according to Claim 7, ~~characterized in that if~~ wherein when several channels

are authorized to transmit simultaneously, the step (S4) ~~consists in~~ comprises selecting from the channels for which data are to be transmitted those that have the best rank (Pi) and ~~in that a~~ wherein the step (S5) comprises ~~consists in~~ giving transmission authorization to those channels.

10. (currently amended) Method according to Claim 6, ~~characterized in that~~ wherein the second test (T2) executes a predetermined convention to compute the rank (Pi) when the current transmission quality indication of the channel, that is Ci(t), is equal to one or more values of the time window.

11. (currently amended) Method according to Claim 5, ~~characterized in that~~ wherein the loops (B1, B2, B3) are, partially or wholly, processed in parallel and not sequentially.

12. (currently amended) Communication system using the method of claim 1, comprising ~~characterized in that it comprises~~:

a receptor ~~method~~ for receiving, for at least one channel, a periodic indication of transmission quality of that channel;

a memory for storing each of the periodic transmission quality indications of each channel received during a time window;

a computing circuit to determine, for each channel for which a periodic indication of transmission quality has been received, the number of stored periodic indications during the time window for a respective channel that are better than a current transmission quality indication for the respective channel, to provide a rank of the respective channel based on the number of stored periodic indications ~~the rank of that channel~~;

a circuit for selecting the transmission channel that has the best rank during the time window.

13. (currently amended) Communication system according to Claim 12, wherein ~~characterized in that~~ the circuit for selecting at least one transmission channel comprises a means of selecting channels over which data are to be transmitted and that have the best rank during the time window.

14. (currently amended) Communication system according to Claim 12, further comprising ~~characterized in that it comprises~~ at least one circuit (A1) for acquiring the transmission quality signal of the channel (2_i), that is Ci(t) on the date t.

15. (currently amended) Communication system according to Claim 12, further comprising ~~characterized in that it comprises~~ at least one memory (A2) ~~consisting~~ of T blocks, each block (A2.k) containing the value of

transmission quality of the channel (2_i) on the date (t-k), that is Ci(t-k), where k is from 1 to T.

16. (currently amended) Communication system according to Claim 12, further comprising ~~characterized in that it comprises~~ at least one set (A3) of at most T comparison circuits, each circuit (A3.k) comparing the current transmission quality indication contained in at least the circuit (A1) with the transmission quality indication on the date t-k contained in the memory block (A2.k), where k is from 1 to T.

17. (currently amended Communication system according to Claim 12, further comprising ~~characterized in that it comprises~~ at least one adder (A4), to the input of which is connected the output of each comparison circuit (A3.k), where k is from 1 to T, and an independent input always giving the value 1.

18. (currently amended) A method of selecting at least one transmission channel from a plurality of transmission channels, in a time division multiple access protocol, comprising the steps of:

receiving for each channel periodic indications of the transmission quality of that channel;

storing each of the periodic indications received for each channel during a time window;

determining for each channel a counter indicating , during the time window, a number of times a stored indication for a respective channel is better than a current transmission quality indication for the respective channel; and

selecting from among the plural channels at least one channel that has the highest counter.